Range and Test Facility Base" has the meaning given that term in section 196(i) of title 10, United States Code.

SA 4596. Mr. BROWN (for himself and Mr. Scott of South Carolina) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place, insert the following:

SEC. . IMPORTANCE OF HISTORICALLY
BLACK COLLEGES AND UNIVERSITES AND MINORITY-SERVING INSTITUTIONS.

(a) INCREASE.—Funds authorized to be appropriated in Research, Development, Test, and Evaluation, Defense-wide, PE 0601228D8Z, section 4201, for Basic Research, Historically Black Colleges and Universities/Minority Institutions, Line 7, are hereby increased by \$20,000,000.

(b) Offset.—Funding in section 4301 for Operation and Maintenance, Afghanistan Security Forces Fund, Afghan Air Force, Line 090, is hereby reduced by \$20,000,000.

SA 4597. Mr. BROWN submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in title II, insert the following:

SEC. ENHANCED PAY AUTHORITY FOR CERTAIN RESEARCH AND TECHNOLOGY POSITIONS IN THE SCIENCE AND TECHNOLOGY REINVENTION LABORATORIES OF THE DEPARTMENT OF DEFENSE.

Section 2358c(e)(2) of title 10, United States Code, is amended by striking "five" and inserting "ten".

SA 4598. Ms. HASSAN (for herself and Mr. CORNYN) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, prescribe personnel military strengths for such fiscal year, and for other purposes: which was ordered to lie on the table; as follows:

At the end, add the following:

## DIVISION E—FEDERAL CYBERSECURITY WORKFORCE EXPANSION ACT

SEC. 5101. SHORT TITLE.

This division may be cited as the "Federal Cybersecurity Workforce Expansion Act".

SEC. 5102. DEFINITIONS.

- In this division:
- (1) DEPARTMENT.—The term "Department" means the Department of Homeland Security
- (2) INSTITUTION OF HIGHER EDUCATION.—The term "institution of higher education" has the meaning given the term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001).
- (3) Secretary.—The term "Secretary" means the Secretary of Homeland Security.

## SEC. 5103. CYBERSECURITY APPRENTICESHIP PILOT PROGRAM.

- (a) DEFINITIONS.—In this section:
- (1) AREA CAREER AND TECHNICAL EDUCATION SCHOOL.—The term "area career and technical education school" has the meaning given the term in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302).
- (2) COMMUNITY COLLEGE.—The term "community college" means a public institution of higher education at which the highest degree that is predominantly awarded to students is an associate's degree, including—

(A) a 2-year Tribal College or University, as defined in section 316 of the Higher Education Act of 1965 (20 U.S.C. 1059c); and

- (B) a public 2-year State institution of higher education.
- (3) COMPETITIVE SERVICE.—The term "competitive service" has the meaning given the term in section 2102 of title 5, United States Code.
- (4) CYBER WORKFORCE POSITION.—The term "cyber workforce position" means a position identified as having information technology, cybersecurity, or other cyber-related functions under section 303 of the Federal Cybersecurity Workforce Assessment Act of 2015 (5 U.S.C. 301 note).
- (5) EARLY COLLEGE HIGH SCHOOL; EDUCATIONAL SERVICE AGENCY; LOCAL EDUCATIONAL AGENCY; SECONDARY SCHOOL; STATE EDUCATIONAL AGENCY.—The terms "early college high school", "educational service agency", "local educational agency", "secondary school", and "State educational agency" have the meanings given those terms in section 8101 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7801).
- (6) EDUCATION AND TRAINING PROVIDER.— The term "education and training provider" means—
- (A) an area career and technical education school;
- (B) an early college high school;
- (C) an educational service agency:
- (D) a high school;
- (E) a local educational agency or State educational agency;
- (F) a Tribal educational agency (as defined in section 6132 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7452)), Tribally controlled college or university (as defined in section 2(a) of the Tribally Controlled Colleges and Universities Assistance Act of 1978 (25 U.S.C. 1801(a)), or Tribally controlled postsecondary career and technical institution (as defined in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302));
- (G) a postsecondary educational institution, as defined in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302);
  - (H) a minority-serving institution;
- (I) a provider of adult education and literacy activities under the Adult Education and Family Literacy Act (29 U.S.C. 3271 et seq.):
- $\begin{array}{cccc} (J) & a & local & agency & administering & plans \\ under & title I & of the Rehabilitation & Act of 1973 \\ (29 & U.S.C. & 720 & et seq.), & other than section & 112 \\ or part C & of that & title & (29 & U.S.C. & 732, 741); \\ \end{array}$
- (K) a related instruction provider, including a qualified intermediary acting as a re-

lated instruction provider as approved by a registration agency;

- (L) a Job Corps center, as defined in section 142 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3192), provided that the participation of the Job Corps center is consistent with the outcomes for Job Corps students described in section 141 of that Act (29 U.S.C. 3191):
- (M) a YouthBuild program, as defined in section 171(b) of the Workforce Innovation and Opportunity Act (29 U.S.C. 3226(b)); or
- (N) a consortium of entities described in any of subparagraphs (A) through (M).
- (7) ELIGIBLE ENTITY.—The term "eligible entity" means—
  - (A) a sponsor;
- (B) a State workforce development board or State workforce agency, or a local workforce development board or local workforce development agency;
  - (C) an education and training provider;
  - (D) a State apprenticeship agency;
  - (E) an Indian Tribe or Tribal organization;
- (F) an industry or sector partnership, a group of employers, a trade association, or a professional association that sponsors or participates in a program under the national apprenticeship system:
  - (G) a Governor of a State:
- (H) a labor organization or joint labor-management organization; or
  - (I) a qualified intermediary.
- (8) EXCEPTED SERVICE.—The term "excepted service" has the meaning given the term in section 2103 of title 5, United States Code
- (9) LOCAL WORKFORCE DEVELOPMENT BOARD.—The term "local workforce development board" has the meaning given the term "local board" in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).
- (10) MINORITY-SERVING INSTITUTION.—The term "minority-serving institution" means an institution of higher education described in section 371(a) of the Higher Education Act of 1965 (20 U.S.C. 1067q(a)).
- (11) NONPROFIT ORGANIZATION.—The term "nonprofit organization" means an organization that is described in section 501(c) of the Internal Revenue Code of 1986 and exempt from taxation under section 501(a) of such Code.
- (12) PROVIDER OF ADULT EDUCATION.—The term "provider of adult education" has the meaning given the term "eligible provider" in section 203 of the Adult Education and Family Literacy Act (29 U.S.C. 3272).
  - (13) QUALIFIED INTERMEDIARY.—
- (A) IN GENERAL.—The term "qualified intermediary" means an entity that demonstrates expertise in building, connecting, sustaining, and measuring the performance of partnerships described in subparagraph (B) and serves program participants and employers by—
- (i) connecting employers to programs under the national apprenticeship system;
- (ii) assisting in the design and implementation of such programs, including curriculum development and delivery for related instruction;
- (iii) supporting entities, sponsors, or program administrators in meeting the registration and reporting requirements of this division;
- (iv) providing professional development activities such as training to mentors;
- (v) supporting the recruitment, retention, and completion of potential program participants, including nontraditional apprenticeship populations and individuals with barriers to employment;
- (vi) developing and providing personalized program participant supports, including by

partnering with organizations to provide access to or referrals for supportive services and financial advising;

- (vii) providing services, resources, and supports for development, delivery, expansion, or improvement of programs under the national apprenticeship system; or
  - (viii) serving as a sponsor.
- (B) PARTNERSHIPS.—The term "partnerships described in subparagraph (B)" means partnerships among entities involved in, or applying to participate in, programs under the national apprenticeship system, including—
- (i) industry or sector partnerships;
- (ii) partnerships among employers, joint labor-management organizations, labor organizations, community-based organizations, industry associations, State or local workforce development boards, education and training providers, social service organizations, economic development agencies, Indian Tribes or Tribal organizations, one-stop operators, one-stop partners, or veterans service organizations in the State workforce development system; or
- (iii) partnerships among 1 or more of the entities described in clause (i) or (ii).
- (14) RELATED INSTRUCTION.—The term "related instruction" means an organized and systematic form of instruction designed to provide an individual in an apprenticeship program with the knowledge of the technical subjects related to the intended occupation of the individual after completion of the program.
- (15) SPONSOR.—The term "sponsor" means any person, association, committee, or organization operating an apprenticeship program and in whose name the program is, or is to be, registered or approved.
- (16) STATE.—The term "State" has the meaning given the term in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101).
- (17) STATE APPRENTICESHIP AGENCY.—The term "State apprenticeship agency" has the meaning given the term in section 29.2 of title 29, Code of Federal Regulations, or any corresponding similar regulation or ruling.
- (18) STATE WORKFORCE DEVELOPMENT BOARD.—The term "State workforce development board" has the meaning given the term "State board" in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).
- (19) WIOA TERMS.—The terms "career planning", "career pathway", "community-based organization", "economic development agency", "industry or sector partnership", "one-stop b training", "one-stop operator", "onestop partner", "recognized postsecondary credential", and "workplace learning advisor" have the meanings given those terms in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).
- (b) ESTABLISHMENT OF APPRENTICESHIP PILOT PROGRAM.—
- (1) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, the Secretary shall establish an apprenticeship pilot program.
- (2) REQUIREMENTS.—The apprenticeship pilot program established under paragraph (1) shall—
- (A) employ pilot program participants in cyber workforce positions within the Department:
- (B) employ not more than 25 new pilot program participants during each year during which the pilot program is carried out:
- (C) be intended to lead to employment in a cyber workforce position within a Federal agency:
- (D) focus on related learning necessary, as determined by the Secretary in consultation with the Director of the Office of Personnel Management and based upon the National Initiative for Cybersecurity Education

- Workforce Framework for Cybersecurity (NIST Special Publication 800–181, Revision 1), or successor framework, to meet the immediate and ongoing needs of cyber workforce positions within Federal agencies;
- (E) be registered with and approved by the Office of Apprenticeship of the Department of Labor or a State apprenticeship agency pursuant to the Act of August 16, 1937 (commonly known as the "National Apprenticeship Act"; 29 U.S.C. 50 et seq.);
- (F) be approved by the Secretary of Veterans Affairs, pursuant to chapter 36 of title 38, United States Code, or other applicable provisions of law, as eligible for educational assistance to veterans; and
- (G) be sponsored by the Department or an eligible entity receiving a contract, cooperative agreement, or grant under subsection (d).
- (c) COORDINATION.—In the development of the apprenticeship pilot program under this section, the Secretary shall consult with the Secretary of Labor, the Director of the National Institute of Standards and Technology, the Secretary of Defense, the Director of the National Science Foundation, and the Director of the Office of Personnel Management to leverage existing resources, research, communities of practice, and frameworks for developing cybersecurity apprenticeship programs.
- (d) OPTIONAL USE OF CONTRACTS, COOPERATIVE AGREEMENTS, OR GRANTS.—The apprenticeship pilot program under this section may include entering into a contract or cooperative agreement with or making a grant to an eligible entity if determined appropriate by the Secretary based on the eligible entity—
- (1) demonstrating experience in implementing and providing career planning and career pathways toward apprenticeship programs:
- (2) having knowledge of cybersecurity workforce development;
- (3) being eligible to enter into a contract or cooperative agreement with or receive grant funds from the Department as described in this section;
- (4) providing participants who complete the apprenticeship pilot program with 1 or more recognized postsecondary credentials;
- (5) using related instruction that is specifically aligned with the needs of Federal agencies and utilizes workplace learning advisors and on-the-job training to the greatest extent possible: and
- (6) demonstrating successful outcomes connecting participants in apprenticeship programs to careers relevant to the apprenticeship pilot program
- (e) APPLICATIONS.—If the Secretary enters into an arrangement as described in subsection (d), an eligible entity seeking a contract, cooperative agreement, or grant under the pilot program shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.
- (f) PRIORITY.—In selecting eligible entities to receive a contract, cooperative agreement, or grant under subsection (d), the Secretary may prioritize an eligible entity that—
- (1) is a member of an industry or sector partnership that sponsors or participates in a program under the national apprenticeship system:
- (2) provides related instruction for an apprenticeship program that was registered with the Department of Labor or a State apprenticeship agency before the date on which the eligible entity applies for the contract, cooperative agreement, or grant under subsection (e):
- (3) works with the Secretary of Defense, the Secretary of Veterans Affairs, or vet-

- erans organizations to transition members of the Armed Forces and veterans to apprenticeship programs in a relevant sector; or
- (4) plans to use the contract, cooperative agreement, or grant to carry out the apprenticeship pilot program under this section with an entity that receives State funding or is operated by a State agency;
- (5) has successfully increased the representation in cybersecurity of women, underrepresented minorities, and individuals from other underrepresented communities; or
- (6) focuses on recruiting women, underrepresented minorities, and individuals from other underrepresented communities.
- (g) TECHNICAL ASSISTANCE.—The Secretary shall provide technical assistance to eligible entities that receive a contract, cooperative agreement, or grant under subsection (d) to leverage the existing job training and education programs of the Department and other relevant programs at appropriate Federal agencies.
- (h) SERVICE AGREEMENT FOR PILOT PROGRAM PARTICIPANTS.—
- (1) IN GENERAL.—Participants in the apprenticeship pilot program under this section shall enter into an agreement to, after completion of the apprenticeship pilot program and if offered employment in a cyber workforce position within a Federal agency post-apprenticeship, accept and continue employment in such cyber workforce position for a period of obligated service equal to the length of service in a position under the apprenticeship pilot program by the participant.
- (2) REPAYMENT FOR PERIOD OF UNSERVED OB-LIGATED SERVICE.—If a participant in the apprenticeship pilot program under this section fails to satisfy the requirements of the service agreement entered into under paragraph (1) for a reason other than involuntary separation, the participant shall repay the cost of any education and training provided to the participant as a part of the apprenticeship pilot program, reduced by the ratio of the period of obligated service completed divided by the total period of obligated service.
- (3) EXCEPTION.—The Secretary may provide for the partial or total waiver or suspension of any service or payment obligation by an individual under this subsection if the Secretary determines that compliance by the individual with the obligation is impossible or would involve extreme hardship to the individual, or if enforcement of such obligation with respect to the individual would be unconscionable.
- (i) APPRENTICESHIP HIRING AUTHORITY.—
  Participants in the apprenticeship pilot program under this section may be appointed to cybersecurity-specific positions in the excepted service as determined appropriate by the Secretary and authorized by section 2208 of the Homeland Security Act of 2002 (6 U.S.C. 658).
- (j) POST-APPRENTICESHIP HIRING AUTHOR-ITY.—Pursuant to subsection (b)(2)(B), a participant who successfully completes the apprenticeship pilot program under this section may be appointed to a cyber workforce position in the excepted service for which the participant is qualified
- the participant is qualified.
  (k) POST-APPRENTICESHIP TRIAL PERIOD.—
  Federal service following the apprenticeship shall be subject to completion of a trial period in accordance with any applicable law, Executive Order, rule, or regulation.
  - (1) Report.—
- (1) SECRETARY.—Not later than 2 years after the date on which the apprenticeship pilot program is established under this section, and annually thereafter, the Secretary, in consultation with the Secretary of Labor and the Director of the Office of Personnel Management, shall submit to Congress a report on the pilot program, including—

- (A) a description of—
- (i) any activity carried out by the Department under this section;
- (ii) any entity that enters into a contract or cooperative agreement with or receives a grant from the Department under subsection (d):
- (iii) any activity carried out using a contract, cooperative agreement, or grant under this section as described in subsection (d); and
- (iv) best practices used to leverage the investment of the Federal Government under this section; and
- (B) an assessment of the results achieved by the pilot program, including—
- (i) the rate of continued employment within a Federal agency for participants after completing the pilot program;
- (ii) the demographics of participants in the pilot program, including representation of women, underrepresented minorities, and individuals from other underrepresented communities;
- (iii) the completion rate for the pilot program, including if there are any identifiable patterns with respect to participants who do not complete the pilot program; and
- (iv) the return on investment for the pilot program.
- (2) COMPTROLLER GENERAL.—Not later than 4 years after the date on which the apprenticeship pilot program is established under this section, the Comptroller General of the United States shall submit to Congress a report on the pilot program, including the recommendation of the Comptroller General with respect to whether the pilot program should be extended.
- (m) TERMINATION.—The authority to carry out the apprenticeship pilot program under this section shall terminate on the date that is 5 years after the date on which the Secretary establishes the apprenticeship pilot program under this section.

### SEC. 5104. PILOT PROGRAM ON CYBERSECURITY TRAINING FOR VETERANS AND MILI-TARY SPOUSES.

- (a) DEFINITIONS.—In this section:
- (1) ELIGIBLE INDIVIDUAL.—The term "eligible individual" means an individual who is—
- (A) a veteran who is entitled to educational assistance under chapter 30, 32, 33, 34, or 35 of title 38, United States Code, or chapter 1606 or 1607 of title 10, United States Code:
- (B) a member of the active or a reserve component of the Armed Forces that the Secretary of Veterans Affairs determines will become an eligible individual under subparagraph (A) within 180 days of such determination, provided that if the individual does anything to make themselves ineligible during the 180-day period, the Secretary of Veterans Affairs may require the individual to repay any benefits received under this section: or
- (C) an eligible spouse described in section 1784a(b) of title 10, United States Code.
- (2) RECOGNIZED POSTSECONDARY CREDEN-TIAL.—The term "recognized postsecondary credential" has the meaning given the term in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102).
- (3) VETERAN.—The term "veteran" has the meaning given the term in section 101 of title 38, United States Code.
- (4) WORK-BASED LEARNING.—The term "work-based learning" has the meaning given the term in section 3 of the Carl D. Perkins Career and Technical Education Act of 2006 (20 U.S.C. 2302).
- (b) ESTABLISHMENT.—Not later than 3 years after the date of enactment of this Act, the Secretary, in coordination with the Secretary of Veterans Affairs, shall establish a pilot program to provide cybersecurity training at no cost to eligible individuals.

- (c) ELEMENTS.—The pilot program established under subsection (b) shall incorporate—
- (1) coursework and training that, if applicable, qualifies for postsecondary credit toward an associate or baccalaureate degree at an institution of higher education;
  - (2) virtual learning opportunities;
- (3) hands-on learning and performance-based assessments;
- (4) Federal work-based learning opportunities and programs; and
- (5) the provision of recognized postsecondary credentials to eligible individuals who complete the pilot program.
- (d) ALIGNMENT WITH NICE WORKFORCE FRAMEWORK FOR CYBERSECURITY.—The pilot program established under subsection (b) shall align with the taxonomy, including work roles and competencies and the associated tasks, knowledge, and skills, from the National Initiative for Cybersecurity Education Workforce Framework for Cybersecurity (NIST Special Publication 800–181, Revision 1), or successor framework.
  - (e) COORDINATION.-
- (1) Training, Platforms, and frame-works.—In developing the pilot program under subsection (b), the Secretary shall coordinate with the Secretary of Veterans Affairs, the Secretary of Defense, the Secretary of Labor, the Director of the National Institute of Standards and Technology, and the Director of the Office of Personnel Management to evaluate and, where possible, leverage existing training, platforms, and frameworks of the Federal Government for providing cybersecurity education and training to prevent duplication of efforts.
- (2) EXISTING EDUCATIONAL ASSISTANCE.—In developing the pilot program under subsection (b), the Secretary shall coordinate with the Secretary of Veterans Affairs to ensure that, to the greatest extent possible, eligible individuals can utilize educational assistance under chapter 30, 32, 33, 34, or 35 of title 38, United States Code, or chapter 1606 or 1607 of title 10, United States Code, or other educational assistance available to eligible individuals, such as the high technology pilot program described in section 116 of the Harry W. Colmery Veterans Educational Assistance Act of 2017 (38 U.S.C. 3001 note), while participating in the program.
- (3) FEDERAL WORK-BASED LEARNING OPPORTUNITIES AND PROGRAMS.—In developing the Federal work-based learning opportunities and programs required under subsection (c)(4), the Secretary shall coordinate with the Secretary of Veterans Affairs, the Secretary of Defense, the Secretary of Labor, the Director of the Office of Personnel Management, and the heads of other appropriate Federal agencies to identify or create, as necessary, interagency opportunities that will enable the pilot program established under subsection (b) to—
- (A) allow the participants to acquire and demonstrate competencies; and
- (B) give participants the capabilities necessary to qualify for Federal employment.
- (f) RESOURCES.
- (1) IN GENERAL.—In any case in which the pilot program established under subsection
- (A) uses training, platforms, and frameworks described in subsection (e)(1), the Secretary, in coordination with the Secretary of Veterans Affairs, shall take such actions as may be necessary to ensure that the trainings, platforms, and frameworks are expanded and resourced to accommodate usage by eligible individuals participating in the pilot program; or
- (B) does not use training, platforms, and frameworks described in subsection (e)(1), the Secretary, in coordination with the Secretary of Veterans Affairs, shall take such

- actions as may be necessary to develop or procure training, platforms, and frameworks necessary to carry out the requirements of subsection (c) and accommodate the usage by eligible individuals participating in the pilot program.
- (2) ACTIONS.—Actions described in paragraph (1) may include providing additional funding, staff, or other resources to—
- (A) recruit and retain women, underrepresented minorities, and individuals from other underrepresented communities;
- (B) provide administrative support for basic functions of the pilot program;
- (C) ensure the success and ongoing engagement of eligible individuals participating in the pilot program:
- (D) connect participants who complete the pilot program to job opportunities within the Federal Government; and
- (E) allocate dedicated positions for term employment to enable Federal work-based learning opportunities and programs, as required under subsection (c)(4), for participants to gain the competencies necessary to pursue permanent Federal employment.
  - (g) Reports —
- (1) SECRETARY.—Not later than 2 years after the date on which the pilot program is established under subsection (b), and annually thereafter, the Secretary shall submit to Congress a report on the pilot program, including—
  - (A) a description of—
- (i) any activity carried out by the Department under this section; and
- (ii) the existing training, platforms, and frameworks of the Federal Government leveraged in accordance with subsection (e)(1);
- (B) an assessment of the results achieved by the pilot program, including—
- (i) the admittance rate into the pilot program:
- (ii) the demographics of participants in the program, including representation of women, underrepresented minorities, and individuals from other underrepresented communities;
- (iii) the completion rate for the pilot program, including if there are any identifiable patterns with respect to participants who do not complete the pilot program;
- (iv) as applicable, the transfer rates to other academic or vocational programs, and certifications and licensure exam passage rates;
- (v) the rate of continued employment within a Federal agency for participants after completing the pilot program;
- (vi) the rate of continued employment for participants after completing the pilot program: and
- (vii) the median annual salary of participants who completed the pilot program and were subsequently employed.
- (2) COMPTROLLER GENERAL.—Not later than 4 years after the date on which the pilot program is established under subsection (b), the Comptroller General of the United States shall submit to Congress a report on the pilot program, including the recommendation of the Comptroller General with respect to whether the pilot program should be extended.
- (h) TERMINATION.—The authority to carry out the pilot program under this section shall terminate on the date that is 5 years after the date on which the Secretary establishes the pilot program under this section.

### SEC. 5105. FEDERAL CYBERSECURITY WORK-FORCE ASSESSMENT EXTENSION.

Section 304(a) of the Federal Cybersecurity Workforce Assessment Act of 2015 (5 U.S.C. 301 note) is amended, in the matter preceding paragraph (1), by striking "2022" and inserting "2025".

SA 4599. Ms. HASSAN (for herself and Mr. THUNE) submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:

At the appropriate place in title II, insert the following:

# SEC. 2 \_\_\_\_. APPLICATION OF PUBLIC-PRIVATE TALENT EXCHANGE PROGRAMS IN THE DEPARTMENT OF DEFENSE TO QUANTUM INFORMATION SCIENCES AND TECHNOLOGY RESEARCH.

In carrying out section 1599g of title 10, United States Code, the Secretary of Defense may establish public-private exchange programs, each with up to 10 program participants, focused on private sector entities working on quantum information sciences and technology research applications.

### SEC. 2 \_\_\_ BRIEFING ON SCIENCE, MATHE-MATICS, AND RESEARCH FOR TRANSFORMATION (SMART) DE-FENSE EDUCATION PROGRAM.

Not later than three years after the date of the enactment of this Act, the Secretary of Defense shall provide Congress with a briefing on participation and use of the program under section 2192a of title 10, United States Code, as amended by this subsection, with a particular focus on levels of interest from students engaged in studying quantum fields.

## SEC. 2 \_\_\_\_\_. IMPROVEMENTS TO DEFENSE QUANTUM INFORMATION SCIENCE AND TECHNOLOGY RESEARCH AND DEVELOPMENT PROGRAM.

- (a) FELLOWSHIP PROGRAM AUTHORIZED.— Section 234 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232; 10 U.S.C. 2358 note) is amended—
- (1) by redesignating subsection (f) as subsection (g); and
- (2) by inserting after subsection (e) the following new subsection (f):
  - "(f) Fellowships.—
- "(1) PROGRAM AUTHORIZED.—In carrying out the program required by subsection (a) and subject to the availability of appropriations to carry out this subsection, the Secretary may carry out a program of fellowships in quantum information science and technology research and development for individuals who have a graduate or post-graduate degree.
- "(2) EQUAL ACCESS.—In carrying out the program under paragraph (1), the Secretary may establish procedures to ensure that minority, geographically diverse, and economically disadvantaged students have equal access to fellowship opportunities under such program."
- (b) MULTIDISCIPLINARY PARTNERSHIPS WITH UNIVERSITIES.—Such section is further amended—
- (1) by redesignating subsection (g), as redesignated by subsection (a)(1), as subsection (h); and
- (2) by inserting after subsection (f), as added by subsection (a)(2), the following new subsection (g):
- "(g) MULTIDISCIPLINARY PARTNERSHIPS WITH UNIVERSITIES.—In carrying out the program under subsection (a), the Secretary of Defense may develop partnerships with universities to enable students to engage in multidisciplinary courses of study."

- (c) COMPTROLLER GENERAL OF THE UNITED STATES ASSESSMENT OF PROGRAM.—
- (1) ASSESSMENT AND BRIEFING.—Not later than 180 days after the date of the enactment of this Act, the Comptroller General of the United States shall—
- (A) commence an assessment of the program carried out under section 234 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232; 10 U.S.C. 2358 note), as amended by this section, with consideration of the report submitted under subsection (h) of such section (as redesignated by subsection (b)(2) of this section); and
- (B) provide the congressional defense committees a briefing on the preliminary findings of the Comptroller General with respect to such program.
- (2) FINAL REPORT.—At a date agreed to by the Comptroller General and the congressional defense committees at the briefing provided pursuant to paragraph (1)(B), the Comptroller General shall submit to the congressional defense committees a final report with the findings of the Comptroller General with respect to the assessment conducted under paragraph (1)(A).

### SEC. 2\_\_\_. IMPROVEMENTS TO NATIONAL QUANTUM INITIATIVE PROGRAM.

- (a) INVOLVEMENT OF DEPARTMENT OF DEFENSE AND INTELLIGENCE COMMUNITY IN NATIONAL QUANTUM INITIATIVE ADVISORY COMMUNITYEE.—
- (1) QUALIFICATIONS.—Subsection (b) of section 104 of the National Quantum Initiative Act (Public Law 115-368; 15 U.S.C. 8814) is amended by striking "and Federal laboratories" and inserting "Federal laboratories, and defense and intelligence researchers".
- (2) INTEGRATION.—Such section is amended—
- (A) by redesignating subsections (e) through (g) as subsection (f) through (h), respectively; and
- (B) by inserting after subsection (d) the following new subsection (e):
- "(e) INTEGRATION OF DEPARTMENT OF DEFENSE AND INTELLIGENCE COMMUNITY.—The Advisory Committee shall take such actions as may be necessary, including by modifying policies and procedures of the Advisory Committee, to ensure the full integration of the Department of Defense and the intelligence community (as defined in section 3 of the National Security Act of 1947 (50 U.S.C. 3003)) in activities of the Advisory Committee."
- (b) CLARIFICATION OF PURPOSE OF MULTI-DISCIPLINARY CENTERS FOR QUANTUM RE-SEARCH AND EDUCATION.—Section 302(c) of the National Quantum Initiative Act (Public Law 115-368: 15 U.S.C. 8842(c)) is amended—
- (1) in paragraph (2), by striking "; and" and inserting a semicolon:
- (2) in paragraph (3), by striking the period at the end and inserting "; and"; and
- (3) by adding at the end the following new paragraph:
- "(4) encouraging workforce collaboration, both with private industry and among Federal entities, including national defense agencies and the intelligence community (as defined in section 3 of the National Security Act of 1947 (50 U.S.C. 3003))."
- (c) COORDINATION OF NATIONAL QUANTUM INFORMATION SCIENCE RESEARCH CENTERS.—Section 402(d) of the National Quantum Initiative Act (Public Law 115–368; 15 U.S.C. 8852(d)) is amended—
- (1) by redesignating paragraphs (2) and (3) as paragraphs (3) and (4), respectively; and
- (2) by inserting after paragraph (1) the following new paragraph (2):
- "(2) other research entities of the Federal government, including research entities in the Department of Defense and research entities in the intelligence community (as de-

- fined in section 3 of the National Security Act of 1947 (50 U.S.C. 3003));".
- (d) NATIONAL QUANTUM COORDINATION OFFICE, COLLABORATION WHEN REPORTING TO CONGRESS.—Section 102 of the National Quantum Initiative Act (Public Law 115–368; 15 U.S.C. 8812) is amended—
- (1) by redesignating subsection (c) as subsection (d); and
- (2) by inserting after subsection (b) the following new subsection (c):
- "(c) Collaboration When Reporting to Congress.—The Coordination Office shall ensure that when participants in the National Quantum Initiative Program prepare and submit reports to Congress that they do so in collaboration with each other and as appropriate Federal civilian, defense, and intelligence research entities."
- (e) REPORTING TO ADDITIONAL COMMITTEES OF CONGRESS.—Paragraph (2) of section 2 of such Act (15 U.S.C. 8801) is amended to read as follows:
- ''(2) APPROPRIATE COMMITTEES OF CONGRESS.—The term 'appropriate committees of Congress' means—
- "(A) the Committee on Commerce, Science, and Transportation, the Committee on Energy and Natural Resources, the Committee on Armed Services, and the Select Committee on Intelligence of the Senate; and
- "(B) the Committee on Energy and Commerce, the Committee on Science, Space, and Technology, the Committee on Armed Services, and the Permanent Select Committee on Intelligence of the House of Representatives"
- SA 4600. Mr. LUJÁN submitted an amendment intended to be proposed to amendment SA 3867 submitted by Mr. REED and intended to be proposed to the bill H.R. 4350, to authorize appropriations for fiscal year 2022 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe military personnel strengths for such fiscal year, and for other purposes; which was ordered to lie on the table; as follows:
- At the end of subtitle E of title XXXI, add the following:

### SEC. 3157. AUTHORIZATION FOR NATIONAL SECU-RITY LABORATORIES AND NUCLEAR WEAPONS PRODUCTION FACILITIES TO COVER CERTAIN TRAINING AND EDUCATION COSTS.

- (a) IN GENERAL.—Notwithstanding subsections (d) and (e) of section 31.205-44 of title 48, Code of Federal Regulations, on and after the date of the enactment of this Act, the director of a national security laboratory or nuclear weapons production facility may provide grants to educational and training institutions to cover the costs of educating employees (including other than bona fide employees) and prospective employees of the laboratory or facility for the development of a workforce that meets the needs of the laboratory or facility, including the costs of the donation of equipment, scholarships, and fellowships.
- (b) REVISION TO FEDERAL ACQUISITION REGULATION.—As soon as practicable after the date of the enactment of this Act, the Federal Acquisition Regulatory Council shall revise the Federal Acquisition Regulation to carry out subsection (a).
  - (c) Definitions.—In this section:
- (1) BONA FIDE EMPLOYEE.—The term "bona fide employee" has the meaning given that term in section 52.203-5 of title 48, Code of Federal Regulations (or a successor regulation).